EPA Climate Change and Water News September 12, 2013

The EPA Climate Change and Water News is a bi-weekly newsletter from the U.S. Environmental Protection Agency (EPA) Office of Water that features news and information about EPA and other federal agencies related to climate change and water. Partner activities, as well as related events and publications, are also included.

For more information on climate change and water, please visit our website: http://www.epa.gov/water/climatechange.

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U.S. EPA News

EPA's WaterSense Program Shares Water-Saving Tips for a Drought

Drought happens somewhere in the U.S. every year and, in September 2012, 65% of the country was in drought. Drought is sometimes called the slow motion natural disaster. Economic losses due to drought in 2012 were in the billions and many communities struggled to provide important water services. During a drought, water utilities may ask customers to limit outdoor watering or impose other restrictions, but all members of a community can step up their savings to ensure that water is available to meet critical needs. The WaterSense Program has shared water saving tips to keep in mind during a drought. To read these tips, please visit: http://www.epa.gov/watersense/our_water/drought.html.

EPA Releases New Climate Science Lesson Plans for Middle School Classrooms

EPA has released seven new lesson plans on climate change developed specifically for middle school students. The lesson plans and related classroom activities are tailored to meet the National Science Learning Standards, and the majority can be completed in one class period of 45 to 60 minutes. Topics covered by the lesson plans include: the difference between weather and climate, the sources of greenhouse gas emissions, the carbon cycle, sea level rise, and the impact of climate change on coral reefs. The lesson plans can be found on EPA's climate change website for students at: http://epa.gov/climatechange/kids/resources/lesson-plans.html.

Call for Nominations for 2014 Climate Leadership Awards Closes September 13th

EPA's Climate Protection Partnerships Division is committed to reducing greenhouse gases (GHGs) through cost-effective partnerships to advance clean energy and energy efficiency across the U.S. economy. As part of this commitment, EPA co-sponsors the Climate Leadership Awards (CLA) with three partners: The Association of Climate Change Officers, the Center for Climate and Energy Solutions, and the Climate Registry. The CLA is a national awards program that recognizes and incentivizes exemplary corporate, organizational, and individual leadership in response to climate change. In February 2012, the first-ever awards were presented to one individual and 20 organizations from across the U.S. The award recipients are leading the way in the management and reduction of GHG emissions - both in internal operations and throughout the supply chain. In February 2013, the second annual awards were presented to two individuals and 21 organizations. The application period for the 2014 Climate Leadership Awards closes September 13, 2013. For more information, visit: http://www.epa.gov/climateleadership/awards/.

Seeking Feedback on the EPA Water and Climate Change Website

We would like to update the EPA Climate Change and Water website (www.epa.gov/water/climatechange). If you have any ideas, comments, suggestions, or anything else you wish to share with us to improve the site, please let us know by sending an email to: water climate change@epa.gov.

Other Federal Agency News

NOAA Coastal Services Center Releases Economic Framework Guide for Coastal **Community Infrastructure**

Coastal areas across the United States are beginning to incorporate sea level rise adaptation into their community planning. One of the most challenging aspects of adapting to sea level rise is understanding the economic implications of future inundation risk and the costs and benefits of different adaptation options. Communities are already grappling with difficult decisions about how to locate, maintain, and protect expensive community infrastructure such as roads, hospitals, and wastewater treatment plants. This report, "What Will Adaptation Cost? An Economic Framework for Coastal Community Infrastructure" provides a framework that community leaders and planners can use to make more economically informed decisions about adapting to sea level rise and storm flooding. The four-step framework can be used to perform a holistic assessment of costs and benefits of different adaptation approaches across a community, or to focus in on select infrastructure. The report also discusses the expertise needed at each step in the process. To view the report, visit:

http://www.csc.noaa.gov/digitalcoast/publications/adaptation.

Other News

Geneva Association Releases Report on Ocean Warming and Implications for the **Insurance Industry**

The Geneva Association's Report: "Warming of the Oceans and Implications for the (Re)insurance

Industry" provides an overview of the detected changes in the oceans and their impact on extreme events and hazard probabilities over the last few decades. This report summarizes the changes in risk management strategies that (re)insurance companies can implement to address the new situation appropriately, comply with regulatory requirements and ultimately improve their ratings. The report describes the evidence for ocean warming since the mid-20th century, with the majority of the report detailing the impact of ocean warming on extreme events. The drivers addressed include sea level rise and an intensified hydrological cycle, as well as dominant drivers for large-scale variations in the climate system. Other impacts discussed include tropical cyclones, extra-tropical winter storms, severe convective storms, and the uncertain future of the marine ecosystems. To view the report, visit: https://www.genevaassociation.org/media/616661/ga2013-warming_of_the_oceans.pdf.

First-of-Its-Kind Easement in Maryland Protects Historic Area from Sea Level Rise Impacts

Through a first-of-its-kind easement designed to protect coastal areas from the impacts of sea level rise and storm surge, the State of Maryland has preserved 221 acres through a Coastal Resilience Easement. A new element under Program Open Space, Coastal Resilience Easements are designed to protect areas that may be prone to high waters and storm surge by permanently eliminating development, restricting impervious surfaces, protecting areas that allow wetlands to migrate, and requiring periodic Soil Conservation and Water Quality plan updates, all of which can help natural areas more quickly recover from flooding. Over the past century, Maryland has seen approximately one foot of relative sea level rise and the disappearance of 13 bay islands. To better protect coastal areas threatened by encroaching waters, the State now reviews all land acquisitions for climate change impacts. Climate change and coastal data used in development of the easement is available to the public through Maryland's Coastal Atlas (http://dnr.maryland.gov/ccp/coastalatlas/). More on protecting coastal habitats can be found on the Maryland Climate Change and Coastal Conservation website at: http://dnr.maryland.gov/ccs/habitats_slr.asp. To learn about the easement, visit: http://news.maryland.gov/dnr/2013/08/21/first-of-its-kind-easement-protects-historic-area-from-sea-level-rise-impacts/.

Yale University Releases Report: "Climate Change in the Coloradan Mind"

In a newly released report, the Yale Project on Climate Change Communication provides findings based on a recent statewide survey in Colorado. The survey found that most Coloradans (70%) believe global warming is happening, while only one in five (19%) believe it is not. Among other findings, many Coloradans say the issue of global warming is very or somewhat important to them (73%), and over half are very or somewhat worried about it. About half of Coloradans say they have personally seen the impact of climate change, such as the increased severity of wildfires, droughts, reduced snowpack, and heat waves, and about half believe global warming is caused mostly by human activities. The study also found that many Coloradans want more action on global warming from their elected officials. To view the report, visit: http://environment.yale.edu/climate-communication/article/climate-change-in-the-coloradan-mind.

Wetlands Watch Releases Report about Homeowners Insurance and Adaptation in Coastal Virginia

A report from Wetlands Watch entitled "Homeowners Insurance Changes in Coastal Virginia: Causes and Consequences for Shoreline Communities" describes the increasing costs of homeowners' insurance along the Atlantic Coast, as well as changing coverage. The report notes that for most private homeowners, coverage changes will be felt in a gradual and growing way as public and private insurance costs rise to reflect the risks of living along the shore. To view the report, visit: http://www.wetlandswatch.org/WetlandScience/SeaLevelRise/PrivateInsurance.aspx?goback=%2Egde_2 754890 member 257328935.

Rockefeller Foundation Announces 100 Resilient Cities Centennial Challenge

To enable 100 cities to better address major 21st century challenges, the Rockefeller Foundation is inviting cities around the world to apply for the "100 Resilient Cities Centennial Challenge." The chosen

cities will receive a variety of benefits, including financial support to hire a chief resilience officer to oversee the development of a resilience strategy for the city. Winning cities will be announced in three rounds over the next three years, with the final round of winners named in 2015. Municipal government leaders or major institutions can register to apply on behalf of their cities. Registration is required by September 23, 2013 in order to receive the application. For more information, visit: http://www.rockefellerfoundation.org/our-work/current-work/100-resilient-cities.

American Rivers Releases Report on Stream Daylighting

Stream daylighting is a relatively new approach that brings buried waterways back to life by physically uncovering and restoring them. Communities can undertake daylighting projects to aid their efforts in reducing polluted runoff, addressing flash flooding concerns, and improving the livability of the built environment. According to this report from American Rivers, urbanization increases the likelihood of worsening floods. One study found that paving over 25 percent of a watershed could increase the risk of flooding for the area from a formerly rare severe flood to a twice-a-decade event. The report identifies and analyzes the benefits of stream daylighting, including water quality improvements, flood mitigation, and community and economic revitalization. To view the report, visit: http://www.americanrivers.org/newsroom/resources/daylighting-streams-breathing-life-into-urban-streams-and-communities/.